

Work Order ID 67684

Page 1

Tuesday, March 29, 2011 11:23:50 AM

Item ID: D206-642-341

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 3/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/1/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 3/29/2011

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2650

F

100

0.00



DOCUMENT CONTROL

DC

0.00

Memo

Document Control

Photocopy bluefile and create labels per PPP D206-642-341 CHG003

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Deburr Fwd edge of tube

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R ☐ Aluminum Rod

4-Grind weld flush to cap on top surface only.

5-Cut aft end to length as per dwg D2650

6-Drill pilot holes using drill Jig DT8168A (A, & B) and DT8025. Open to Ø0.312"

7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

11-4-7

11-4-13

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

115

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

11 04 14 11

120

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

BB 11/04/14

125

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

DP 11-4-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail
(without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015Ensure holes line upAllow 12 Hrs
cure time before cuttingStart Date: 11-4-14 Time: 6:30pmFinish Date: 11-4-14 Time: 1:15pmA/R ☐ Sikaflex-291 ☐ M116948Sikaflex expiry date: 12-1-15

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

3 BB 11/04/14

DP 11-4-14

Smoules

W

W/O:		WORK ORDER CHANGES						
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.
A/R ☐ Aluminum Rod M11385 BE 11/04/19

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650 Debur

4- Install nut plate as per dwg

BE 11/04/20

170

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

8 11/04/20

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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/11/04/170

190

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

1 152 11-4-27.

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: *10:40*
OVEN TEMPERATURE: *320°*
FINISH TIME: *11:10.**1 152 11-4-27.*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

= 7 m-l 11/05/04

1X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220

0.00



HandFinish

HandFinishing

Memo

0.00

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R ☐ Sikaflex-291 ☐ _____Sikaflex expiry date: ☐ _____

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R ☐ Sikaflex-291 ☐ _____Sikaflex expiry date: ☐ _____6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4 ☐

Batch:

M 117315

M 116945

12/01

M 116945

12/01



M-L 11/05/04

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00						1 BR 11-5-11	
240 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00						(#)	
250 Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPP D206-642-341 Location: _____ PPP Rev: <u>PPP 67688</u>	0.00 0.00						P4/6/11	

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 67684

Tuesday, March 29, 2011 11:23:51 AM

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Revision ID:

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Cust Item ID:

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/6/18 *[Signature]*
11-06-7
[Signature]

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Picklist Print

Tuesday, March 29, 2011 11:23:57 AM

Page 1

Work Order ID: 67684

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube



Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM
 IPP Rev: I 08-09-29 revF as per dwg DD verified by: EC Est Rev: J 09-03-02 as per DSI9440 rev.a DD verified by: EC IPP rev K 10.08.03 chg ms27039-1-08 for "C" type EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960JD416 	NAS1149D0463J	Purchased	No	M116805			Each	0.0000		1			
Washer													
CCR264SS3-3 		Purchased	No				Each	197.0000		2			
Cherry Rivet													
				<u>Location</u>	<u>Loc Qty</u>		<u>Loc Code</u>						
				FP-B	2								
				113973	2								
				ST311	195								
				113973	2								
				117086	193								
CR3212-4-03 		Purchased	No				Each	1,280.000		2			
Cherry Rivet													
				<u>Location</u>	<u>Loc Qty</u>		<u>Loc Code</u>						
				FP-B	16								
				110139	16								
				ST311	1264								
				114859	1264								

IX M-L 11/05/04

BE 11/04/20

2

BE 11/04/20

2

W/O:		WORK ORDER CHANGES					
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Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D2620 Manufactured No

Each 11.0000 1



Skidtube, 206 Skidtube

Location

Loc Qty

Loc Code

LG

11

62684

7

64784

4

D2647 Manufactured No

Each 47.0000 1



Cap

Location

Loc Qty

Loc Code

LG002

47

55352

47

D2649 Manufactured No

Each 99.0000 19



Cross Bolt Spacer

Location

Loc Qty

Loc Code

LG001

99

65317

99

D2654-5 Manufactured No

Each 2.0000 1



Web

Location

Loc Qty

Loc Code

LG

2

64878

2

D2680-041 Manufactured No

Each 32.0000 1



Nut Plate

Location

Loc Qty

Loc Code

ST020

32

55366

32

Tuesday, March 29, 2011 11:23:58 AM

Shop Packet Print

Page 2

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Parent Item Name: Replacement Skidtube

Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

MS27039C1-08

Purchased

No

Each

780.0000



SCREW

56

m-l 11/05/04

Location

Loc Qty

Loc Code

FP-A

39

116022

39

ST293

741

115589

341

116373

400

220

Each

0.0000

54

54

ALS4-1032-130

Purchased

No



Insert

AN960C10L

NAS1149C0332
R

Purchased

No

220

Each

0.0000

54

54



washer

AN960JD10L

NAS1149D0332J

Purchased

No

220

Each

0.0000

2

2



Washer

D2646

Manufactured

No

220

Each

57.0000

1

1



Aft Cap

m-l 11/05/04

Location

Loc Qty

Loc Code

FP006

57

62678

57

1x

Tuesday, March 29, 2011 11:23:58 AM

Shop Packet Print

Page 3

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Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D2651-1 Manufactured No

220 Each

129.0000 14 14



Plug

Location

Loc Qty

Loc Code

FP-A

129

57869 ✓

119

66445

10

m-l 11/05/04

14x

D2651-3 Manufactured No

220 Each

300.0000 14 14



O-Ring

Location

Loc Qty

Loc Code

FP-A

300

61962

300

M 66956

m-l 11/05/04

14x

D3535-11 Manufactured No

220 Each

8.0000 1 1



Wearshoe

Location

Loc Qty

Loc Code

FP019

8

46714

1

57261 ✓

2

63676

5

m-l 11/05/04

1x

D3535-23 Manufactured No

220 Each

3.0000 1 1



Wearshoe

Location

Loc Qty

Loc Code

FP021

3

61830

1

63571

1

66236 ✓

1

m-l 11/05/04

1x

*

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Picklist Print

Tuesday, March 29, 2011 11:23:58 AM

Work Order ID: 67684

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D3535-35

Manufactured No

220 Each

13.0000

1

1



Wearshoe

Location

Loc Qty

Loc Code

FP018

13

62461

1

65926

12

D3536-11

Manufactured No

220 Each

22.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP011

22

46649

1

46715

5

57867

4

65574

12

D3536-23

Manufactured No

220 Each

35.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP011

35

43406

2

53468

1

63238

1

66240

6

66560

25

m-l 11/05/04

IX
m-l 11/05/04

IX
m-l 11/05/04

IX

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, March 29, 2011 11:23:59 AM

Work Order ID: 67684

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-35

Manufactured

No

220

Each

14.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP012

14

62462

1

65573

1

66237

12

D3537-1

Manufactured

No

220

Each

36.0000

6

6



Wearpad

Location

Loc Qty

Loc Code

FP017

36

63313

2

65927

34

D3537-3

Manufactured

No

220

Each

18.0000

1

1



Wearpad

Location

Loc Qty

Loc Code

FP017

18

35697

1

61674

1

65929

16

MS27039-4-06

Purchased

No

220

Each

83.0000

1

1



Screw

Location

Loc Qty

Loc Code

FP-A

34

115460

34

ST292

49

115460

49

M-L 11/05/04

IX
M-L 11/05/04

6X

M-L 11/05/04
IX

M-L 11/05/04

IX

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 67684

9/11-0329

RELEASED
08-07-23

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW: INCCRP. DEC9136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

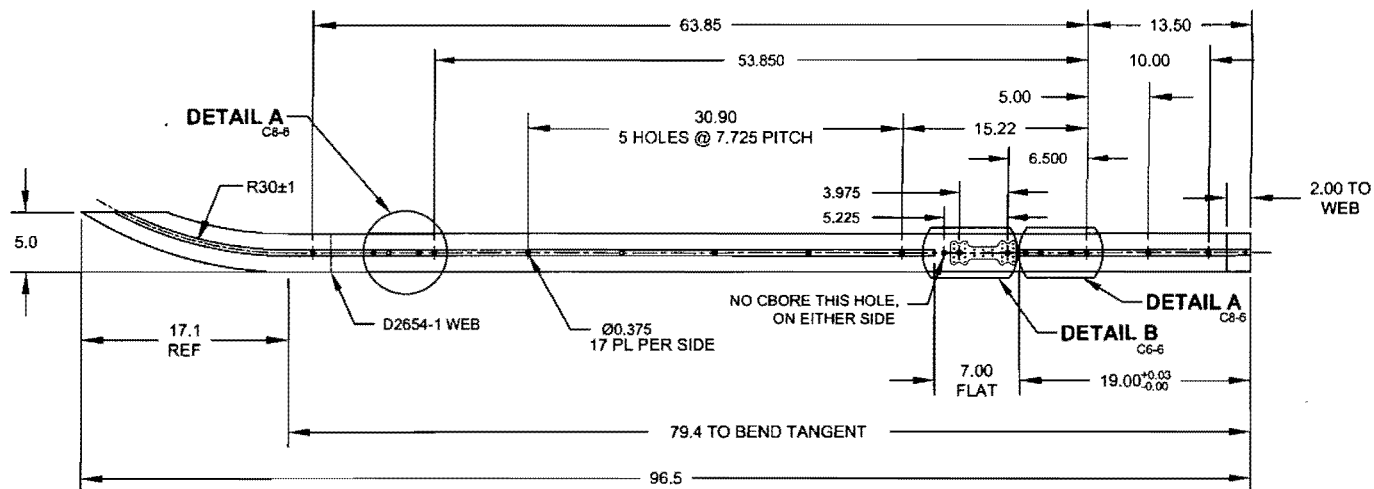
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

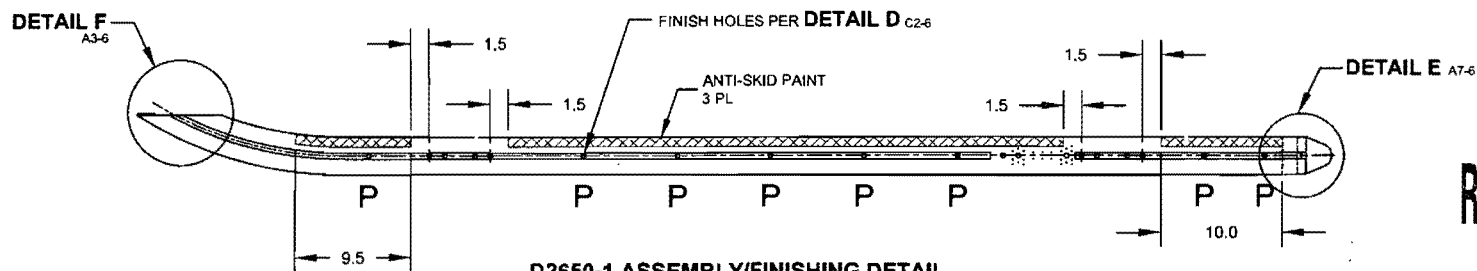
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries







D2650-1 BENDING/DRILLING DETAIL



D2650-1 ASSEMBLY/FINISHING DETAIL

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68092211P

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MFG. APPR.		D2650	SHEET 2 OF 6
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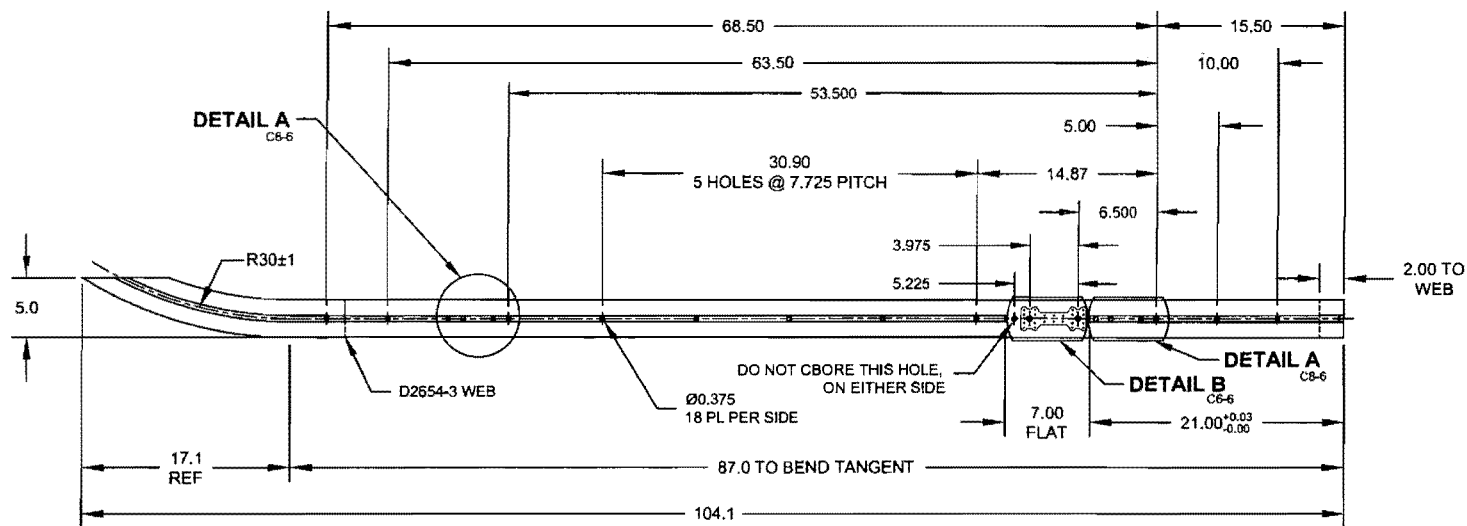
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

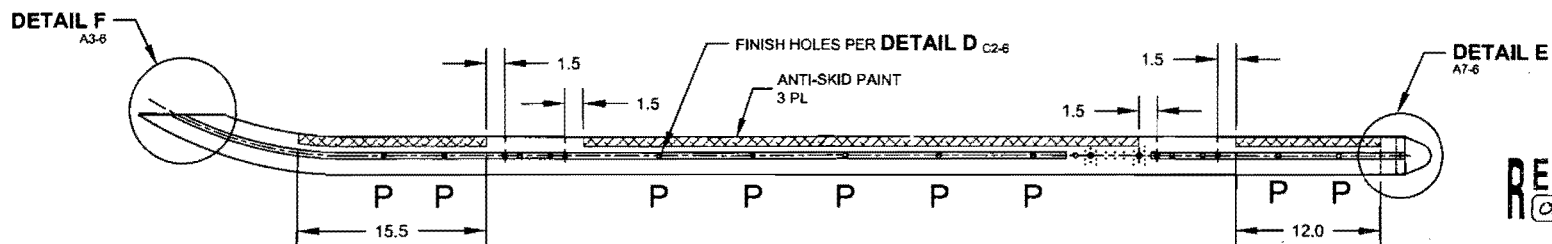
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2650-3 BENDING/DRILLING DETAIL



D2650-3 ASSEMBLY/FINISHING DETAIL

u697684

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05-07-2018

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MFG. APPR.	<i>[Signature]</i>	D2650	SHEET 3 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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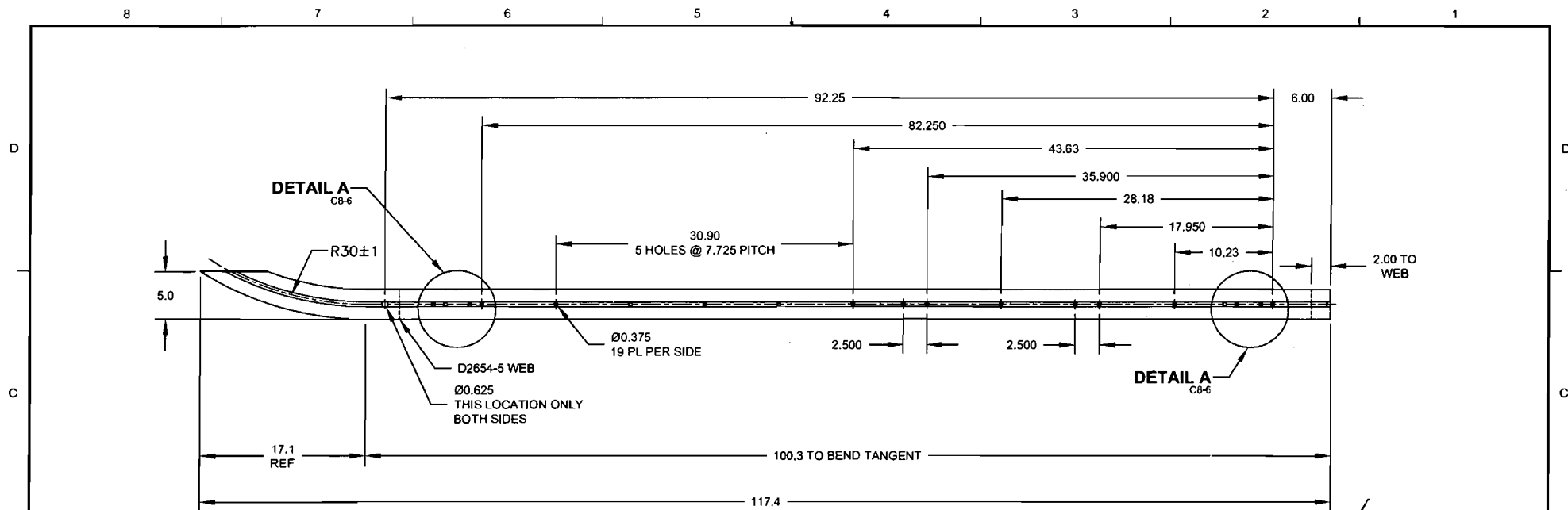
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

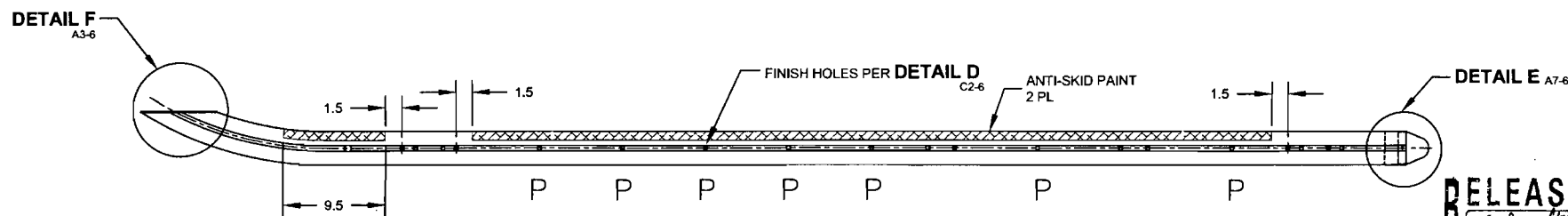
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D2650-5 BENDING/DRILLING DETAIL



D2650-5 ASSEMBLY/FINISHING DETAIL

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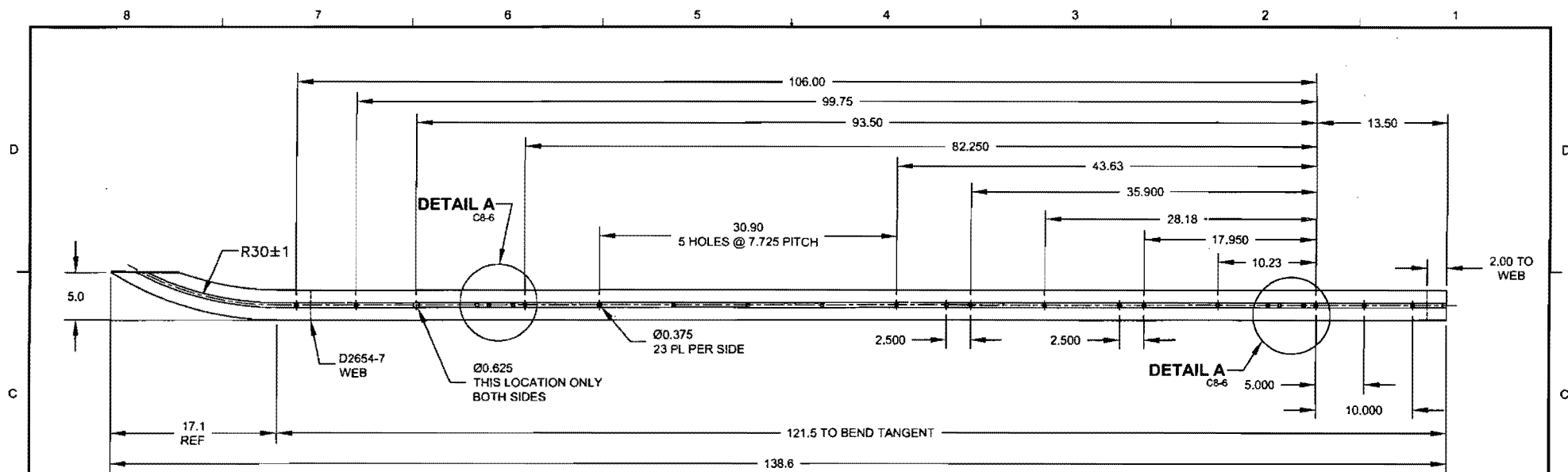
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

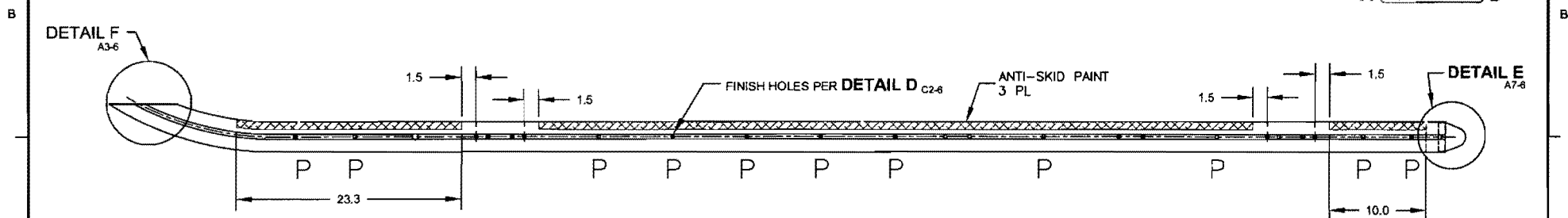
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D2650-7 BENDING/DRILL DETAIL

W/67484
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D2650-7 ASSEMBLY/FINISHING DETAIL

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MFG. APPR.	<i>[Signature]</i>	D2650	SHEET 5 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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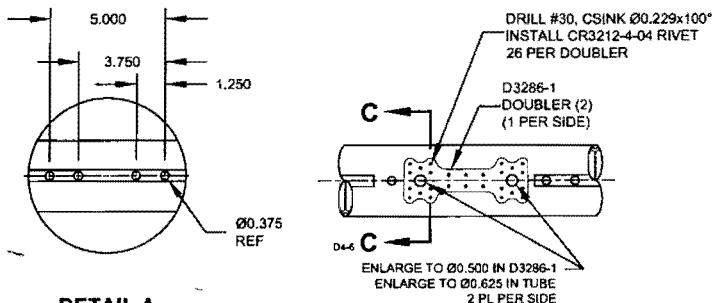
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

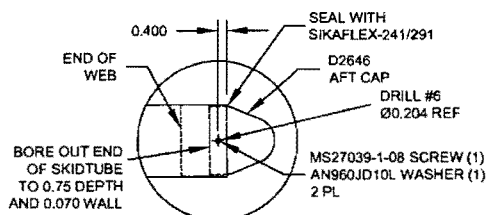
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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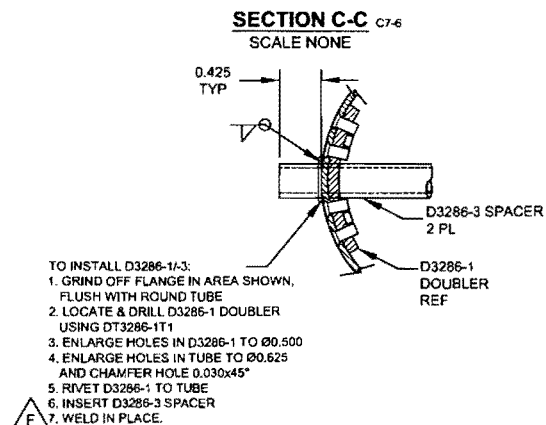


DETAIL A
SCALE 2X
C2-2
D7-2
C2-3
D7-3
C2-4
D7-4
C2-5
D6-5

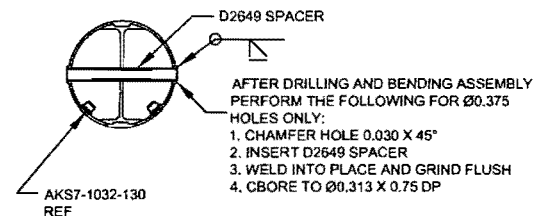
DETAIL B
SCALE 2X
C3-2
C3-3



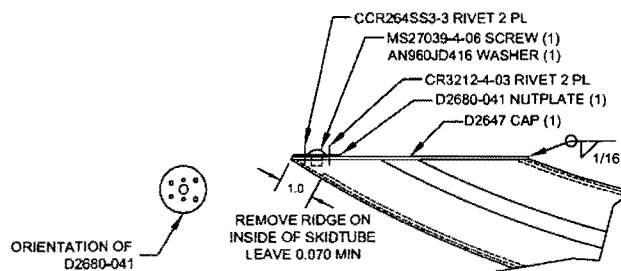
DETAIL E
SCALE 2X
B2-2
B2-3
B1-4
B1-5



F



DETAIL D
FOR Ø0.375 HOLES ONLY
SCALE 3X
B4-2
B4-3
B4-4
B4-5



DETAIL F
SCALE NONE
B8-2
B8-3
B8-4
B8-5

- DETAIL F NOTES:**
1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D2647 (TRIM AS NECESSARY)
 4. WELD D2647 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D2680-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

RELEASED
08-09-2019

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
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MFG. APPR.		D2650	SHEET 6 OF 6
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 246

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 66462
Part number: D206-642-441
Description: 206 skid tube
Welding Process: Tig[☒] Mig[]
Base material: aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier: Pat Lums Date of Test Coupon 11-03-09
Welder: Barclay Elliott Date of Test Coupon 11-03-09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

